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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,390	01/09/2004	Kia Silverbrook	DAM03US	6102

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SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER	
NGUYEN, LAMSON D	

ART UNIT	PAPER NUMBER
2861	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/753,390	SILVERBROOK, KIA	
	Examiner	Art Unit	
	Lamson D. Nguyen	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment dated 06/08/06*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-13 and 15-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 9-10* is/are rejected.

7)☒ Claim(s) *11-13 and 15-19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 1 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 25 of copending Application No. 10/542,454. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speakman (6,503,831) in view of Gothait.

Speakman teaches a three dimensional creation system comprising:

Claims 1, 2:

- a plurality of printheads, the system printing at least part of each layers simultaneously (figure 19 teaches two printheads 1200 and 1206 that print layers simultaneously)
- wherein the printheads are configured to enable printing of at least two different materials in at least one layer (figure 19 teaches a combined layer of particulates 1202 and organic binder material 1208)

Claim 3:

- at least one first printhead for printing a first material and at least one second printhead for printing a second material (figure 19 teaches printhead 1206 depositing particulates 1202 and printhead 1200 depositing organic binder material 1208)

Claim 4:

- including at least one printhead that can print at least two different materials (figure 19 teaches two printheads 1200 and 1206 that print layers simultaneously)

Claim 7:

- the system includes a plurality of printheads (figures 1 and 19)

Claim 9:

- wherein the printheads are configured such that at least one of the layers may be printed with a first set of materials and at least one other of the layers may be printed with a second set of materials, and wherein the first and second sets are not the same (figure 19 teaches printhead 1206 depositing particulates 1202 and printhead 1200 depositing organic binder material 1208)

Claim 10:

- the system is configured to enable at least one first printhead that is initially configured to print at least part of a first layer to be dynamically reconfigured to print at least part of a second layer (figure 19 teaches printhead 1206 deposits particulates 1202 first to create the first layer while ejection of organic binder material 1208 by printhead 1200)

However, Speakman does not teach a first printhead is actively maintained at a first temperature and a second printhead is maintained at a second temperature.

It is well-known in the art to utilize a printing system having at least two printheads, wherein each printhead is maintained at a different temperature, as taught by Gothait in column 5, lines 30-34 that "at least two printing heads, wherein each printing head dispenses interface material having a different hardness", which suggests

that each printing head is maintains a different temperature corresponding to different hardness.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Speakman to incorporate the teaching of printing heads dispensing materials of different hardness, thus suggesting different temperatures, for the purpose of creating different modulus of elasticity (column 5, lines 35-39).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Speakman in view of Gothait.

Speakman in view of Gothait teaches a system that prints simultaneous layers to fabricate a three-dimensional object, but does not teach 100 layers being simultaneously printed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Speakman to include 100 layers since it has been held that discovering an optimum value of a result effective variable involve only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Speakman in view of Gothait as applied to claim 1 above, and further in view of Hermanson (5,581,284).

Speakman in view of Gothait teaches all claimed features of the invention except for full-width printheads.

It is well-known that a serial or non-fullwidth printhead printing system can be incorporated to utilize fullwidth printheads as taught by Hermanson (column 6, lines 45-48).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Speakman in view of Gothait to incorporate the teaching of pagewidth printheads taught by Hermanson for the purpose of increasing printing throughput.

Allowable Subject Matter

Claims 11-13, 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is 571-272-2259. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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LAMSON NGUYEN
PRIMARY EXAMINER
08/17/05